CONTENTS OF VOLUME 63

Special Issue: A New Era in East–West Collaboration in Paleomagnetism: Databases and Experimental Techniques
Guest Editors: E. McClelland, L. Pesonen, R. Enkin, V. Shcherbatov and V. Kropacek

Contents vii
Preface ix

Research Papers
Global Palaeomagnetic Database Project
M.W. McElhinny and J. Lock (Fishing Point, N.S.W., Australia) 1
Organization of spatial and temporal data in paleomagnetic investigations
M.K. Kanarchev (Sofia, Bulgaria) 7
Computation of the palaeointensity of the geomagnetic field
R. Chvojka (Prague, Czechoslovakia) 13
Domain structure of PSD- and MD-grains and its temperature dependence
V.P. Shcherbakov (Moscow, U.S.S.R.), S.A. Tarashchan (Kiev, U.S.S.R.) and B.E. Lamash (Vladivostok, U.S.S.R.) 23
Modelling of hysteresis processes in magnetic rock samples using the Preisach diagram
P. Hejda and T. Zelinka (Prague, Czechoslovakia) 32
The magnetic properties of siderite concretions and the CRM of their oxidation products
J.J. Hus (Viroinval, Belgium) 41
Kinetics of single-phase oxidation of titanomagnetite
A.K. Gapeev and S.K. Gribov (Moscow, U.S.S.R.) 58
Detection of magnetic carriers in rocks: results of susceptibility changes in powdered rock samples induced by temperature
O. Orlický (Bratislava, Czechoslovakia) 66
Conversion of the magnetic susceptibility tensor into the orientation tensor in some rocks
F. Hrouda (Brno, Czechoslovakia) and K. Schulmann (Prague, Czechoslovakia) 71
Variations of the mean susceptibility of rocks under hydrostatic and non-hydrostatic pressure
A. Kapička (Prague, Czechoslovakia) 78
Low-field susceptibility anisotropy of some biotite crystals
K. Zapletal (Brno, Czechoslovakia) 85
A petromagnetic study of Miocene rocks bearing micro-organic material and the magnetic mineral greigite (Sokolov and Cheb basins, Czechoslovakia)
M. Krs, M. Krsová and P. Pruner (Barrandov, Czechoslovakia), A. Zeman, (Prague, Czechoslovakia), F. Novák and J. Jansa (Kutná Hora, Czechoslovakia) 98
Paleomagnetic research on Black Sea Quaternary sediments
V. Kalcheva, P. Nozharov, M. Kovacheva and V. Shopov (Sofia, Bulgaria) 113
Secular variation of the geomagnetic field: data from the varved clays of Soviet Karelia
V.G. Bakhmutov and G.F. Zagniy (Ukraine, U.S.S.R.) 121
Excursions of the magnetic field during the Brunhes chron
G.N. Petrova and G.A. Pospelova (Moscow, U.S.S.R.) 135

Special Issue: Microseisms caused by factors internal and external to the Earth's crust
Guest Editors: E. Hjortenberg and A.N. Nikolaev

Contents iii
Preface v

Historical sketch of microseisms from past to future
P. Bernard (Antony, France) 145
Manifestation of earth deformation processes by high-frequency seismic noise characteristics
B.P. Diakonov (Moscow, U.S.S.R.), B.S. Karryev (Ashkhabad, U.S.S.R.), O.B. Khavroshkin, A.V. Nikolaev, L.N. Rykunov (Moscow, U.S.S.R.), R.R. Seroglasov (Minsk, U.S.S.R.), A.K. Trojanov (Sverdlovsk, U.S.S.R.) and V.V. Tsyplakov (Moscow, U.S.S.R.) 151
On the properties of short-period seismic noise
E.I. Galperin, N.V. Petersen, A.V. Sitnikov and L.P. Vinnik (Moscow, U.S.S.R.) 163
Preliminary results of vibrator-aided experiments in non-linear seismology conducted at Uetze, F.R.G.
P.P. Dimitriu (Thessaloniki, Greece) 172
Analysis of twenty microseism storms during the winter of 1987–1988 and comparison with wave hindcasts
J. Darbyshire (Menai Bridge, Gt. Britain) 181
On correlation of the energies of primary and secondary storm microseisms
A.A. Ostrovsky (Moscow, U.S.S.R.) and H. Korhonen (Helsinki, Finland) 196
Generation of microseisms in the coastal area
E.I. Gordeev (Petropavlovsk-Kamchatsky, U.S.S.R.) 201
On observations of storm microseismic vibrations by seismic stations of the U.S.S.R.
V.N. Tabulevich, L.A. Drugova and G.M. Troshina (Irkutsk, U.S.S.R.) 209
Continuous monitoring and analysis of microseisms in Belgium to forecast storm surges along the North Sea coast
M. de Becker (Brussels, Belgium) 219
A possible origin of 26 s microseisms
P. Bernard and L. Martel (Paris, France) 229
Long-period microseisms at Umeå, Sweden
M. Båth and O. Kulhánek (Uppsala, Sweden) 232
On the spectra shape of seismic noise and earthquakes recorded in the ocean
A.A. Ostrovsky (Moscow, U.S.S.R.) 234
Spectral analysis of seismic signals and noise recorded at the NORESS high-frequency element
F. Ringdal, S. Mykkeltveit, J. Fyen and T. Kværna (Kjeller, Norway) 243
Diurnal and seasonal variations in the microseismic noise level observed at the NORESS array
J. Fyen (Kjeller, Norway) 252
Sources of short-term fluctuations in the seismic noise level at NORESS
T. Kværna (Kjeller, Norway) 269
Spatial characteristics of the NORESS noise field and implications for array detection processing
S. Mykkeltveit, J. Fyen, F. Ringdal and T. Kværna (Kjeller, Norway) 277

Contents of Volume 63 285